UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,191	08/18/2003		Martha Gardner	134734	3700

			EXAMINER
6147 7590 01/16/2007			AHLUWALIA, NAVNEET K
GENERAL ELECTRIC COMPANY			
GLOBAL RESEARCH			ART UNIT / PAPER NUMBER
PATENT DOCKET RM. BLDG. K1-4A59			
NISKAYUNA, NY 12309			2166

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)
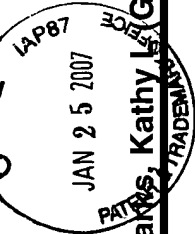
Parks, Kathy L (GE, Research)

From: Parks, Kathy L (GE, Research)
Sent: Friday, January 19, 2007 3:48 PM
To: Yoder, Patrick S (GE, Research, non-ge); Howell, Lynda (GE, Research, non-ge)
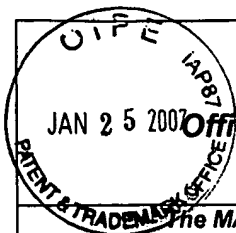**Subject:** 134734-1 OFFICE ACTION DUE 4/16/07

Attachments: 134734-1.PDF

134734-1.PDF (882
KB)

Pat and Lynda,

Updated Page and PIPS with Office Action and access given. Mentor Yoder (you may want to change to Tait Swanson) and
Charkrabarti Responsible. I will send original copy thru the mail.
Have a Good Weekend.
k

http://page.corporate.ge.com/page/docket/viewdocketdetail.php?DocketNo=134734&FilingNo=1

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	Application No.	Applicant(s)
Office Action Summary	10/643,191	GARDNER ET AL.
	Examiner	Art Unit	
	Navneet K. Ahluwalia	2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 November 2006*.
2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle,* 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-26* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) *1-4, 6-26* is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/22/2006 has been entered.

2.   The application has been examined. Claims 1 – 4 and 6 – 26 are pending in this office action.

Response to Arguments

3.   Applicant's arguments filed November 22, 2006 have been fully considered but they are not persuasive. Claims 1 – 4 and 6 – 26 are pending and remain rejected in this Office Action.

4.   In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in

the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re

Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Henly's

prediction of properties of and optimization of plant's output of products in combination

with the prediction models and risk analyzer of Philips would result in accurate

prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly). Also

using the models of Philips would be vital to the refiner to have an accurate prediction of

the properties and values of the resulting product (paragraphs 0061 – 0065, Henly).

Applicant argues that there is no teaching in Philips and Henly of assessing

similarity of crude characteristic data and crude processing data with input crude

characteristic data and input crude processing data respectively to output statistical best

matches with the data stored in the database.

In response to Applicant's argument, the Examiner submits that Henly teaches

assessing similarity of crude characteristic data and crude processing data with input

crude characteristic data and input crude processing data respectively to output

statistical best matches with the data stored in the database in paragraphs 0059 – 0060.

Applicant argues that there is no teaching in Philips and Henly of taking as input

crude information corresponding to the at least one crude or crude blend and at least

one refinery operating parameter and/or condition and using desirability metrics to

assess similarity of the input to data in the database, including the at least one stored

crude or crude blend.

In response to Applicant's argument, the Examiner submits that Henly in combination with Philips teach taking the information of the crude blend and refinery operating parameter and using metrics to assess the data (column 10 lines 59 – 67 and column 11 lines 40 – 54, Philips).

Henly also teaches the use of regressive analysis of data related to the measured properties of material, the process and the characteristics of the product and the predictive equation for calculating a predicted value of the characteristics and utilization (page 2, paragraph 0012, Henly). Philips and Henly in combination teach the claimed invention.

Other claims recite the same subject matter and for the same reasons as cited above the rejection is maintained. Hence, Applicant's arguments do not distinguish the claimed invention over the prior art of record. In light of the foregoing arguments, the 102 rejections are sustained

Claim Rejections - 35 USC § 103

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein

were made absent any evidence to the contrary. Applicant is advised of the obligation

under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

not commonly owned at the time a later invention was made in order for the examiner to

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g)

prior art under 35 U.S.C. 103(a).

7.   Claims 1 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Philips et al. ('Philips' herein after) (US 6,792,399 B1) further in view of Henly et al.

('Henly' herein after) (EP 1102187 A2).

With respect to claim 1,

        Philips discloses a system for assessing and optimizing crude selection

comprising:

-       a database storing data comprising crude characteristic data related to at

        least one crude or crude blend crude processing data related to crude

        processing at a plurality of different operational conditions (column 8 lines 12

        – 21 and 31 – 41, Philips); and

-       a predictive engine having programmable instructions configured for

        execution by at least one processor wherein the predictive engine is

        configured to assess similarity of the crude characteristic data and the crude

        processing data with input crude characteristic data and input crude

        processing data respectively, to output statistical best matched with the data

stored in the database, wherein the predictive engine is configured to execute

at least one predictive performance and/or risk assessment model designed

to optimize or improve a refining process based on the statistical best

matches (column 9 lines 34 – 44 and column 56 lines 47 – 56, Philips).

Philips however does not disclose the crude selection and blend.

Henly teaches the crude selection and blend (page 2 paragraph 0004 and 0012,

Henly) and assessing similarity of the crude characteristic data and using prediction

models to optimize the refining process (page 6 paragraphs 0059 – 0060, Henly).

It would have been obvious to one of ordinary skill in the art of data processing at

the time of the present invention to combine the teachings of cited references because

Henly's prediction of properties of and optimization of plant's output of products in

combination with the prediction models and risk analyzer of Philips would result in

accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly).

8.   Claims 2 – 4, 6 – 10 are rejected under the same rationale given for claim 1. The

citations of the elements claimed and taught are listed below.

With respect to claim 2,

Philips discloses the system in accordance with claim 1, wherein the predictive

engine takes as input crude information corresponding to at least one crude slate and at

least one refinery operating parameter and/or condition (column 11 lines 40 – 54,

Philips) and uses desirability metrics to assess similarity of the input to data in the

database (column 10 lines 59 – 67, Philips).

With respect to claim 3,

Philips discloses the system in accordance with claim 2, wherein the at least one

refinery operating parameter and/or condition corresponds to a specific refinery

(paragraph 0065, Henly), and wherein the at least one predictive performance or risk

assessment model executed by the predictive engine predicts performance or risk

measures of refining the at least one crude slate using the specific refinery for running

the refining process (paragraphs 0039 and 0043, Henly), probability of problems

occurring during the refining process, and distribution of the problems throughout the

refining process (column 10 lines 59 – 67, Philips).

With respect to claim 4,

Philips discloses the system in accordance with claim 1, wherein the predictive

engine accesses treatment options stored within the database suitable for optimizing

performance of the refining process (column 44 lines 30 – 51, Philips).

With respect to claim 6,

Philips discloses the system in accordance with claim 1, wherein the predictive

engine comprises:

- a crude search module which takes as input at least one crude name and/or

    at least one chemical or other characteristic of the at least one crude

identifiable by the at least one crude name and outputs information with respect to at least one crude stored in the database, wherein the at least one crude output by the crude search module corresponds to at least one crude identifiable by the at least one crude name, or corresponds to at least one crude having at least one chemical or other property similar to at least one chemical or other property of the at least one crude identifiable by the at least one crude name (column 9 lines 34 – 44 and column 56 lines 47 – 56, Philips);

- an operating parameters/conditions search module which takes as input at least one refinery operating parameter and/or condition and outputs information stored in the database indicating at least one refinery having at least one identical or similar operating parameter and/or condition compared to the at least one refinery operating parameter and/or condition input (column 11 lines 40 – 54, Philips); and

- a crude slate and chemicals selection module which takes as input the information output by the crude search module and the information output by the operating parameters/conditions search module, and outputs at least one proposed crude slate, chemical treatment and/or performance or risk parameter (column 44 lines 30 – 51, Philips).

With respect to claim 7,

Henly teaches wherein the crude slate and chemicals selection module includes a first tier, wherein the first tier identifies at least one crude slate stored in the database which is similar to at least one user-desired crude slate by scoring each crude slate component of the at least one user-desired crude slate based on how well the crude slate component satisfies user criteria, and combines all individual scores of the at least one user-desired crude slate to provide a composite crude slate score; wherein the first tier further scores each individual operating parameter and/or condition based on how well the individual operating parameter and/or condition satisfies the user criteria for that operating parameter and/or condition and outputs an operational score, and then combines all individual operational scores to provide a composite operational score; and wherein the first tier further determines a highest total overall score by combining the composite crude slate and composite operational scores (paragraphs 0060 and 0062, Henly).

With respect to claim 8,

Henly teaches wherein the crude slate and chemicals selection module further includes a second tier, wherein the second tier includes as an input at least information derived by the first tier and obtains predicted response parameters of interest for selected crude slates, operational parameters and/or conditions, and/or chemical treatments using the at least one predictive performance model (page 1 section 57, Henly).

With respect to claim 9,

Philips discloses the system in accordance with claim 1, wherein the predictive

engine executes at least one optimization algorithm for the refining process (column 45

lines 16 – 25 and column 54 lines 61 – 67, Philips).

With respect to claim 10,

Philips discloses the system in accordance with claim 9, wherein the at least one

predictive performance model and/or the at least one risk assessment model is a type of

model selected from the group consisting of linear regression models; logistic

regression models; non-linear regression models; classification and regression trees

and extensions thereof; multiple additive regression splines and extensions thereof;

partial least squares regression models (column 12 lines 54 – 62, Philips); generalized

additive models; neural networks and extensions thereof, such as projection pursuit

regression (column 4 lines 33 – 40 and column 44 lines 26 – 31, Philips); simulation

models (column 3 lines 58 – 62, Philips); expert system-based models, such as

Bayesian Belief Networks; theoretical calculation models; engineering economic

models; financial risk models; decision analytic models; and engineering process

models based on chemistry, physics and engineering principles, such as reaction

kinetics and thermodynamics, mass transfer, energy transfer, separation processes,

and fluid dynamics (column 55 lines 13 – 33, Philips).

With respect to claim 11,

Philips discloses a method for assessing and optimizing crude selection

comprising the steps of:

- accessing a database for obtaining data comprising crude characteristic data

  related to at least one stored crude or crude blend (column 8 lines 12 – 21

  and 31 – 41, Philips) and crude processing data related to crude processing

  at a plurality of different operational conditions;

- assessing similarity of the crude characteristic data and the crude processing

  data with input crude characteristic data and input crude processing data,

  respectively, to output statistical best matches with the data stored in the

  database; and

- executing at least one predictive performance and/or risk assessment model

  to optimize or improve a refining process for at least one crude or crude blend

  based on the statistical best matches (column 9 lines 34 – 44 and column 56

  lines 47 – 56, Philips).

Philips however does not disclose the crude selection and blend.

Henly teaches the crude selection and blend (page 2 paragraph 0004 and 0012,

Henly) and assessing similarity of the crude characteristic data and using prediction

models to optimize the refining process (page 6 paragraphs 0059 – 0060, Henly).

It would have been obvious to one of ordinary skill in the art of data processing at

the time of the present invention to combine the teachings of cited references because

Henly's prediction of properties of and optimization of plant's output of products in combination with the prediction models and risk analyzer of Philips would result in accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly).

9.   Claims 12 - 16 are rejected under the same rationale given for claim 11. The citations of the elements claimed and taught are listed below.

With respect to claim 12,

Philips discloses the method in accordance with claim 11, further comprising the steps of:

- taking as input crude information corresponding to the at least one crude or crude blend and at least one refinery operating parameter and/or condition (column 11 lines 40 – 54, Philips); and

- using desirability metrics to assess similarity of the input to data in the database, including the at least one stored crude or crude blend (column 10 lines 59 – 67, Philips).

With respect to claim 13,

Philips discloses the method in accordance with claim 12, wherein the at least one refinery operating parameter and/or condition corresponds to a specific refinery (paragraph 0065, Henly), and wherein the at least one predictive performance or risk assessment model predicts performance or risk measures of refining the at least one

crude or crude blend using the specific refinery for running the refining process

(paragraphs 0039 and 0043, Henly), probability of problems occurring during the

refining process, and distribution of the problems throughout the refining process

(column 10 lines 59 – 67, Philips).

With respect to claim 14,

Philips discloses the method in accordance with claim 11, further comprising the

step of accessing treatment options stored within the database suitable for improving or

optimizing performance of the refining process (column 44 lines 30 – 51, Philips).

With respect to claim 15,

Philips discloses the method in accordance with claim 11, further comprising the

step of executing at least one optimization algorithm for the refining process (column 45

lines 16 – 25 and column 54 lines 61 – 67, Philips).

With respect to claim 16,

Philips discloses the method in accordance with claim 15, wherein the at least

one predictive performance model and/or the at least one risk assessment model is a

type of model selected from the group consisting of linear regression models; logistic

regression models; non-linear regression models; classification and regression trees

and extensions thereof; multiple additive regression splines and extensions thereof;

partial least squares regression models (column 12 lines 54 – 62, Philips); generalized

additive models; neural networks and extensions thereof, such as projection pursuit

regression; simulation models (column 3 lines 58 – 62, Philips); expert system-based

models, such as Bayesian Belief Networks; theoretical calculation models; engineering

economic models; financial risk models; decision analytic models; and engineering

process models based on chemistry, physics and engineering principles, such as

reaction kinetics and thermodynamics, mass transfer, energy transfer, separation

processes, and fluid dynamics (column 55 lines 13 – 33, Philips).

With respect to claim 17,

Philips discloses a computer readable medium storing a set of instructions

configured for execution by at least one processor for performing the steps of:

- accessing a database for obtaining data comprising crude characteristic data

  related to at least one stored crude or crude blend (column 8 lines 12 – 21

  and 31 – 41, Philips) and crude processing data related to crude processing

  at a plurality of different operational conditions;

- assessing similarity of the crude characteristic data and the crude processing

  data with input crude characteristic data and input crude processing data,

  respectively to output statistical best matched with the data stored in the

  database; and

- executing at least one predictive performance and/or risk assessment model

  to optimize or improve a refining process for at least one crude or crude blend

based on the statistical best matches (column 9 lines 34 – 44 and column 56

lines 47 – 56, Philips).

Philips however does not disclose the crude selection and blend.

Henly teaches the crude selection and blend (page 2 paragraph 0004 and 0012,

Henly) and assessing similarity of the crude characteristic data and using prediction

models to optimize the refining process (page 6 paragraphs 0059 – 0060, Henly).

It would have been obvious to one of ordinary skill in the art of data processing at

the time of the present invention to combine the teachings of cited references because

Henly's prediction of properties of and optimization of plant's output of products in

combination with the prediction models and risk analyzer of Philips would result in

accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly).

10.   Claims 18 - 22 are rejected under the same rationale given for claim 17. The

citations of the elements claimed and taught are listed below.

With respect to claim 18,

Philips discloses the computer readable medium in accordance with claim 17,

further performing the steps of:

-       taking as input crude information corresponding to the at least one crude or

        crude blend and at least one refinery operating parameter and/or condition

        (column 11 lines 40 – 54, Philips); and

- using desirability metrics to assess similarity of the input to data in the database, including the at least one stored crude or crude blend (column 10 lines 59 – 67, Philips).

With respect to claim 19,

Philips discloses the computer readable medium in accordance with claim 18, wherein the at least one refinery operating parameter and/or condition corresponds to a specific refinery (paragraph 0065, Henly), and wherein the at least one predictive performance and/or risk assessment model predicts performance or risk measures of refining the at least one crude or crude blend using the specific refinery for running the refining process (paragraphs 0039 and 0043, Henly), probability of problems occurring during the refining process, and distribution of the problems throughout the refining process (column 10 lines 59 – 67, Philips).

With respect to claim 20,

Philips discloses the computer readable medium in accordance with claim 17, further performing the step of accessing treatment options stored within the database suitable for optimizing performance of the refining process (column 44 lines 30 – 51, Philips).

With respect to claim 21,

Philips discloses the computer readable medium in accordance with claim 17,

further performing the step of executing at least one optimization algorithm for the

refining process (column 45 lines 16 – 25 and column 54 lines 61 – 67, Philips).

With respect to claim 22,

Philips discloses the computer readable medium in accordance with claim 21,

wherein the at least one predictive performance model and/or the at least one risk

assessment model is a type of model selected from the group consisting of linear

regression models; logistic regression models; non-linear regression models;

classification and regression trees and extensions thereof; multiple additive regression

splines and extensions thereof; partial least squares regression models (column 12

lines 54 – 62, Philips); generalized additive models; neural networks and extensions

thereof, such as projection pursuit regression (column 4 lines 33 – 40 and column 44

lines 26 – 31, Philips); simulation models (column 3 lines 58 – 62, Philips); expert

system-based models, such as Bayesian Belief Networks; theoretical calculation

models; engineering economic models; financial risk models; decision analytic models;

and engineering process models based on chemistry, physics and engineering

principles, such as reaction kinetics and thermodynamics, mass transfer, energy

transfer, separation processes, and fluid dynamics (column 55 lines 13 – 33, Philips).

With respect to claim 23,

Philips discloses a system comprising: a crude analyzer configured to compare a selected crude type and a selected refinery parameter with historical data comprising crude data related to a plurality of crude types and refinery data related to a plurality of refineries (column 8 lines 12 – 21 and 31 – 41, Philips), wherein the crude analyzer is configured to identify one or more crude types and one or more refinery parameters in the historical data that are statistically similar to the selected crude type and the selected refinery parameter, respectively; and a refinery optimizer configured to improve a refining process for the selected crude type and the selected refinery parameter based on the one or more crude types and the one or more refinery parameters identified by the crude analyzer (column 9 lines 34 – 44 and column 56 lines 47 – 56, Philips).

Philips however does not disclose the crude selection and blend.

Henly teaches the crude selection and blend (page 2 paragraph 0004 and 0012, Henly) and assessing similarity of the crude characteristic data and using prediction models to optimize the refining process (page 6 paragraphs 0059 – 0060, Henly).

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because Henly's prediction of properties of and optimization of plant's output of products in combination with the prediction models and risk analyzer of Philips would result in accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly).

11.   Claim 24 is rejected under the same rationale given for claim 23. The citations of

the elements claimed and taught are listed below.

With respect to claim 24,

       Philips discloses the system of claim 23, wherein the refinery optimizer is

configured to evaluate a plurality of treatment options (column 44 lines 30 – 51, Philips).

With respect to claim 25,

       Philips discloses a method, comprising: comparing a selected crude type and a

selected refinery parameter with historical data comprising crude data related to a

plurality of crude types and refinery data related to a plurality of refineries (column 8

lines 12 – 21 and 31 – 41, Philips), wherein comparing a selected crude type and a

selected refinery parameter comprises identifying one or more crude types and one or

more refinery parameters in the historical data that are statistically similar to the

selected crude type and the selected refinery parameter, respectively and improving a

refining process for the selected crude type and the selected refinery parameter based

on the one or more crude types and the one or more refinery parameters identified in

the comparing step (column 9 lines 34 – 44 and column 56 lines 47 – 56, Philips).

       Philips however does not disclose the crude selection and blend.

       Henly teaches the crude selection and blend (page 2 paragraph 0004 and 0012,

Henly) and assessing similarity of the crude characteristic data and using prediction

models to optimize the refining process (page 6 paragraphs 0059 – 0060, Henly).

It would have been obvious to one of ordinary skill in the art of data processing at the time of the present invention to combine the teachings of cited references because Henly's prediction of properties of and optimization of plant's output of products in combination with the prediction models and risk analyzer of Philips would result in accurate prediction of the crude oil blend to be used (paragraph 0004 and 0012, Henly).

12.   Claim 26 is rejected under the same rationale given for claim 25. The citations of the elements claimed and taught are listed below.

With respect to claim 26,

Philips discloses the method of claim 25, wherein improving comprises evaluating a plurality of treatment options (column 44 lines 30 – 51, Philips).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Navneet K. Ahluwalia whose telephone number is 571-272-5636. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alam T. Hosain can be reached on 571-272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.
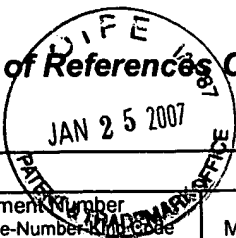
Navneet K. Ahluwalia
Examiner
Art Unit 2166

MOHAMMAD ALI
PRIMARY EXAMINER

Dated: 01/04/2007

	Application/Control No.	Applicant(s)/Patent Under Reexamination
	10/643,191	GARDNER ET AL.
	Examiner	Art Unit	Page 1 of 1
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JAN 2 5 2007

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,611,735 B1	08-2003	Henly et al.	700/266
*	B	US-6,792,399 B1	09-2004	Phillips et al.	705/36R
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.